



Project and Professionalism (6CS007)

Milestone 3

Music Recommendation System (Oni Music)

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1. Functional Decomposition Diagram (FDD)

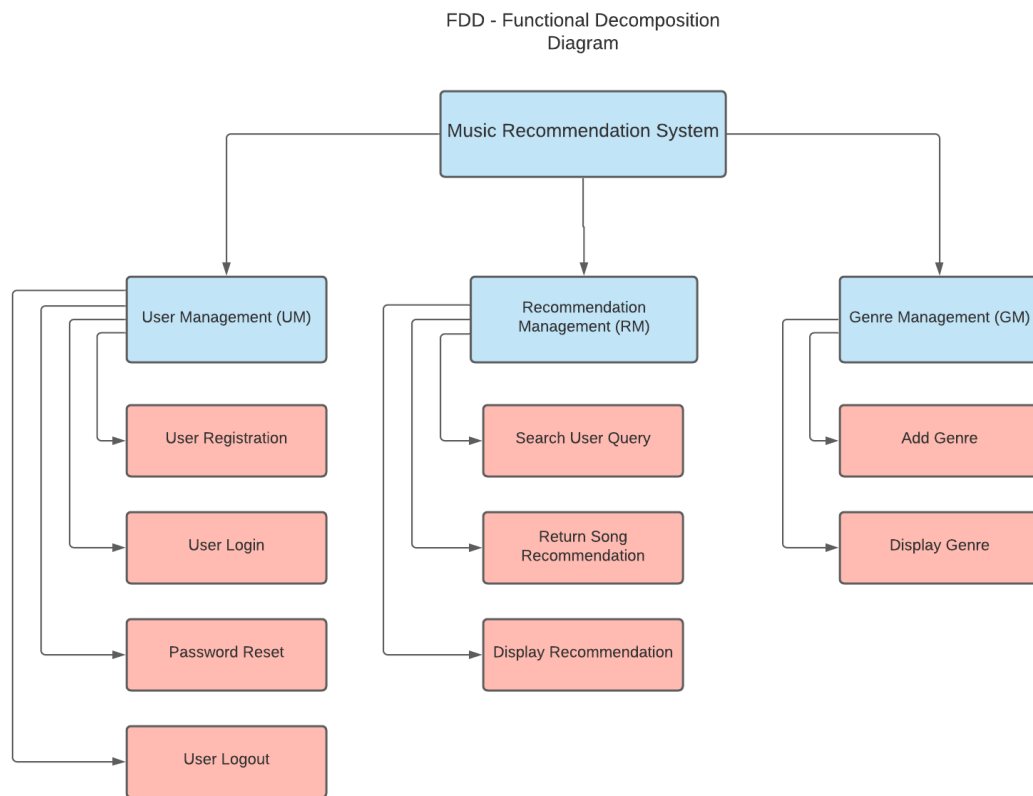


Figure 1: Functional Decomposition Diagram (FDD)

2. Software Requirement Specification (SRS)

Legend

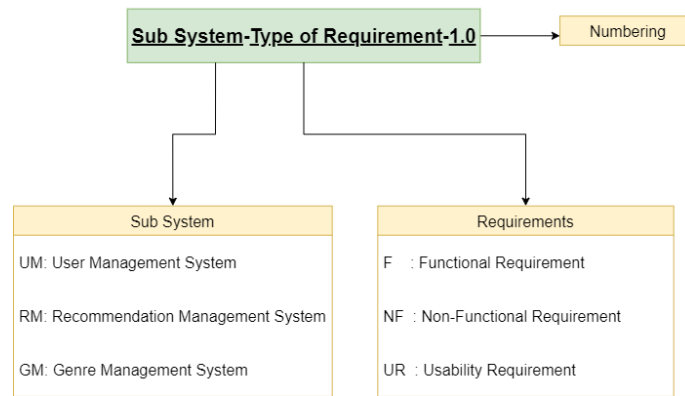


Figure 2: Legend

2.1. User Management System (UM)

Requirement Code	Requirement Description	Use Case	MoSCoW Prioritization
UM-F-1.0	The user should be able to create a new user account.	Create User	Must have
UM-NF-1.1	While creating a user, the username must be less than 150 characters and only include letters, digits and @/./+/_ only.		Must have
UM-F-2.0	The user should be able to logout of the system.		Must have
UM-F -2.1	The user should be able to logout of the account that they are logged in.		Must have

UM-F-3.0	The system should allow the user to reset their password.		Must have
UM-NF-3.1	While resetting the user password, the user must be logged into the related account.		Must have

2.2. Recommendation Management System (RM)

Requirement Code	Requirement Description	Use Case	MoSCoW Prioritization
RM-F-1.0	The user should be able to search for desired song.	Create search query	Must have
RM-NF-1.1	While searching, the user must insert the name of a song track.		Should have
RM-F-2.0	The user should be able to acquire music recommendation based on the search query.		Must have

2.3. Genre Management System (GM)

Requirement Code	Requirement Description	Use Case	MoSCoW Prioritization
GM-F-1.0	The user should be able to browse the genre page.	Create genre view	Must have

GM-F-2.0	The user should be able to search for specific genre.		Must have
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3. Activity Diagrams

3.1. User Management System

3.1.1. User Registration

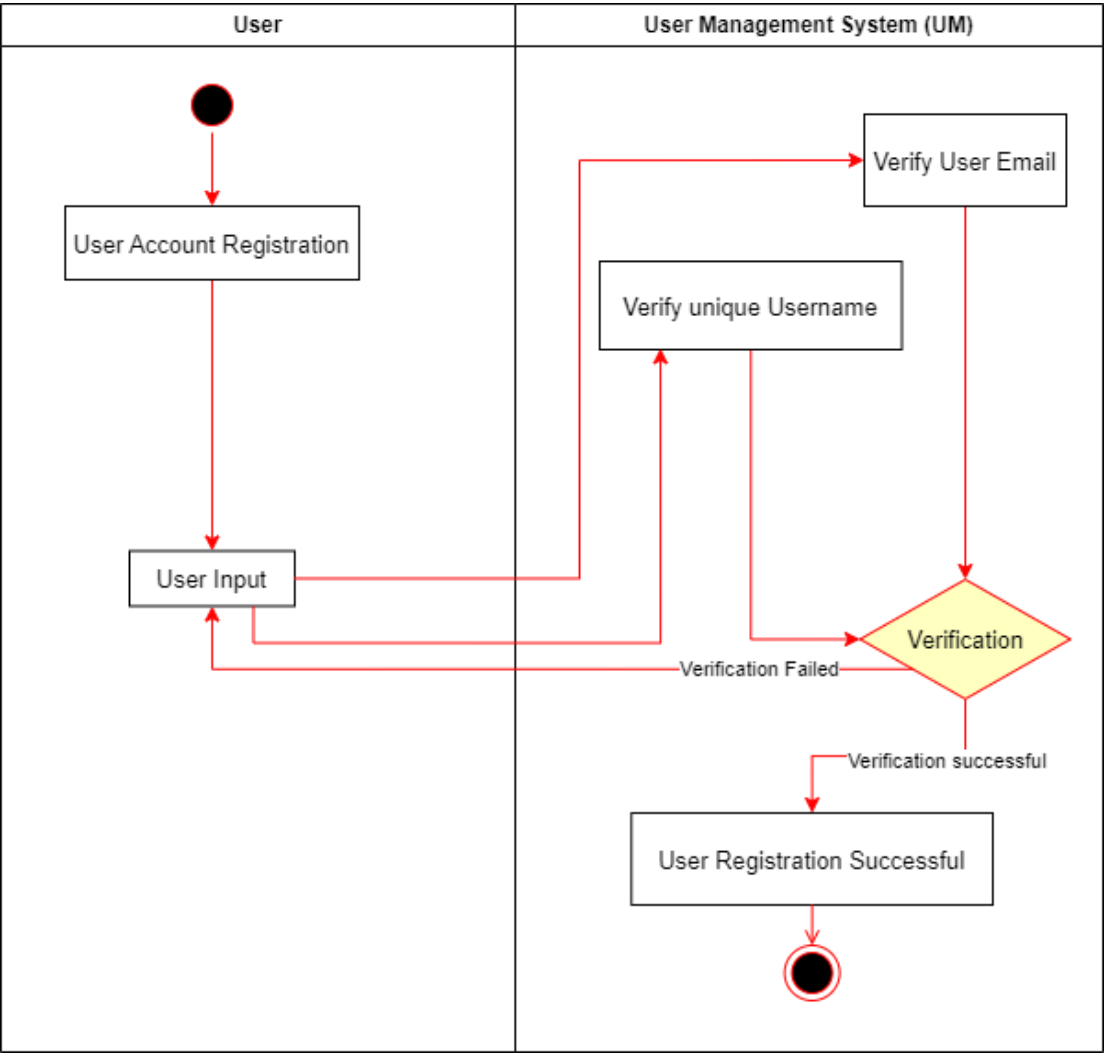


Figure 3: User Registration (Activity Diagram)

3.1.2. User Login

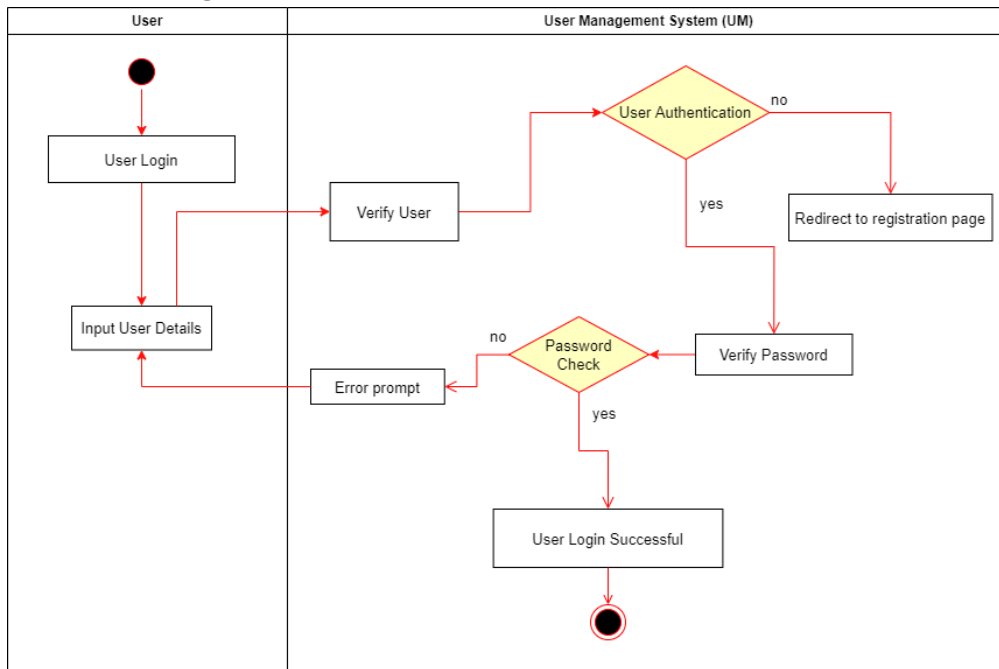


Figure 4: User Login (Activity Diagram)

3.1.3. User Logout

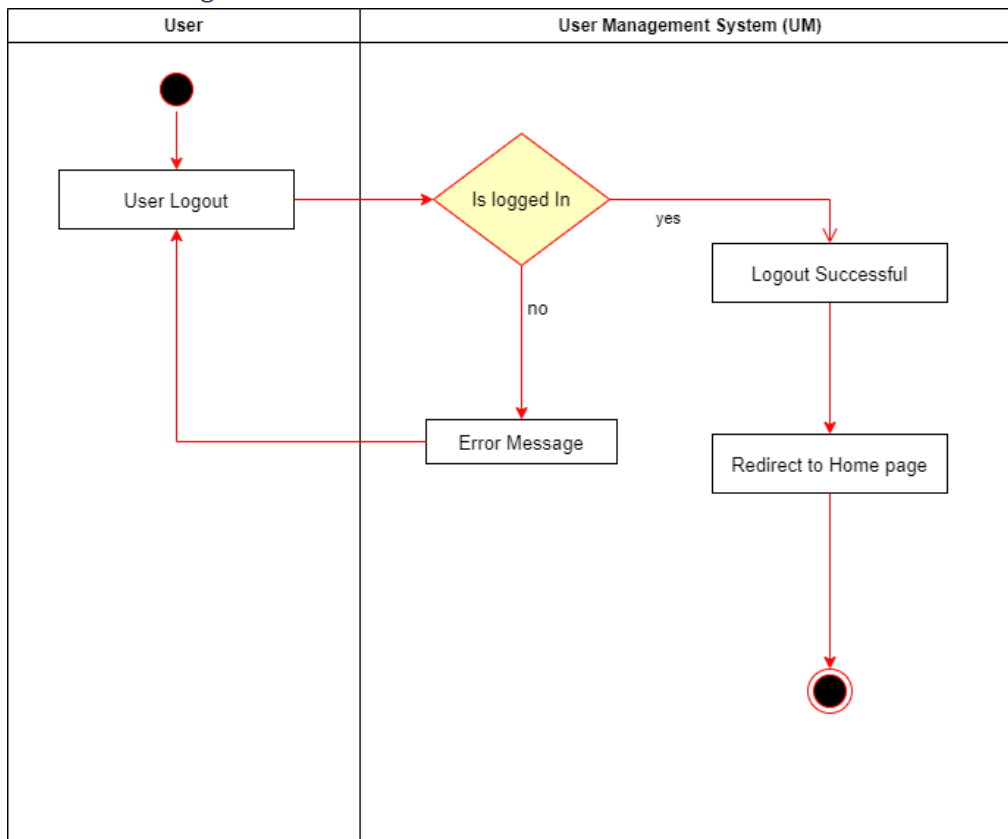


Figure 5: User Logout (Activity Diagram)

3.1.4. User Password Reset

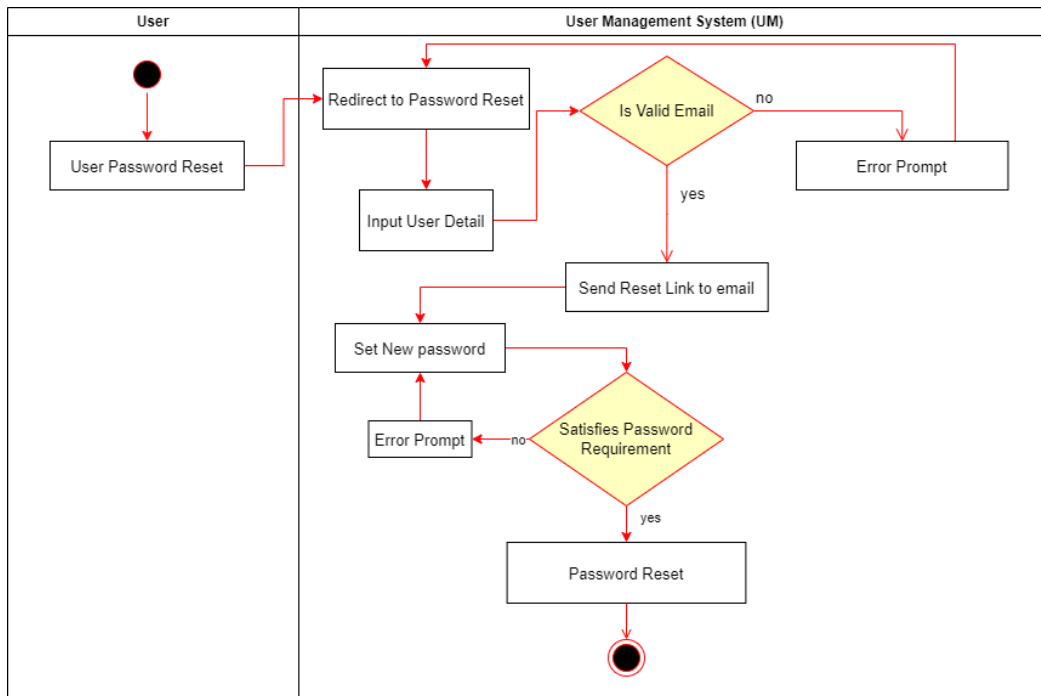


Figure 6: User Password Reset (Activity Diagram)

3.2. Recommendation Management System

3.2.1. Search Query

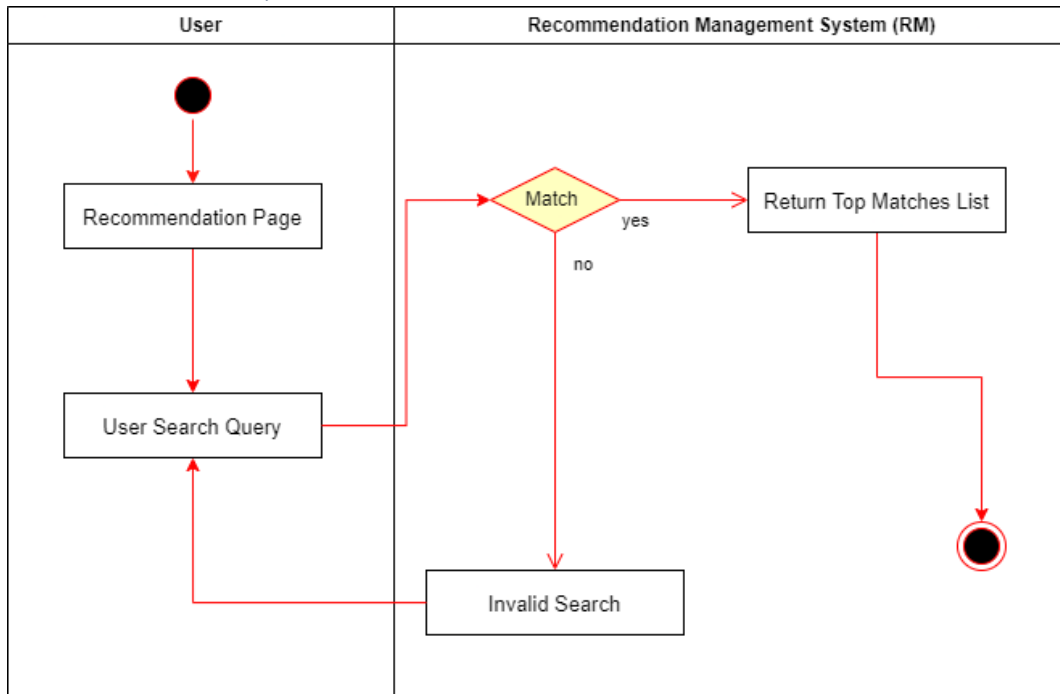


Figure 7: Search Query (Activity Diagram)

3.2.2. Song Recommendation

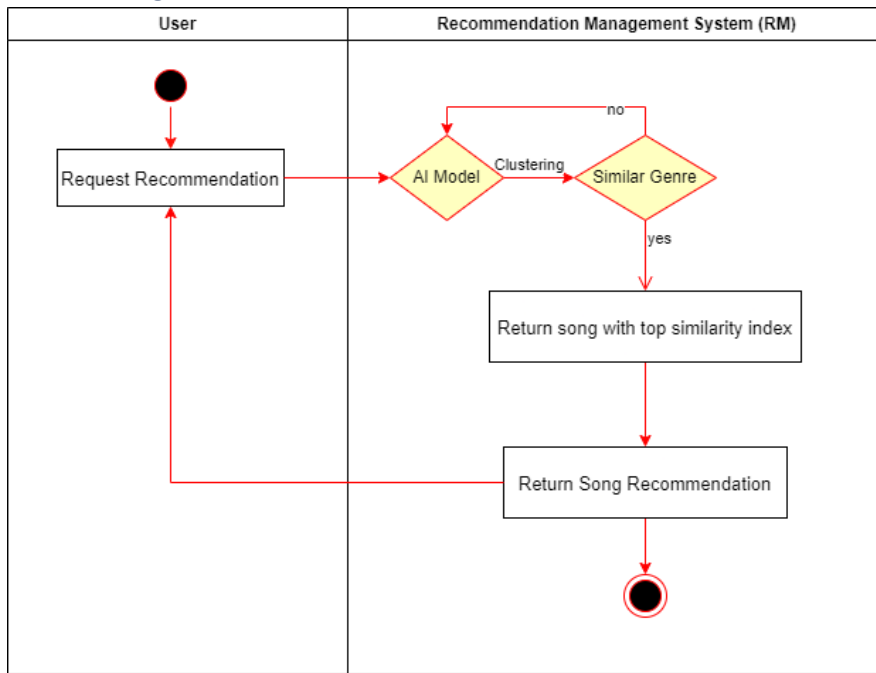


Figure 8: Song Recommendation (Activity Diagram)

3.3. Genre Management System

3.3.1. Genre Display

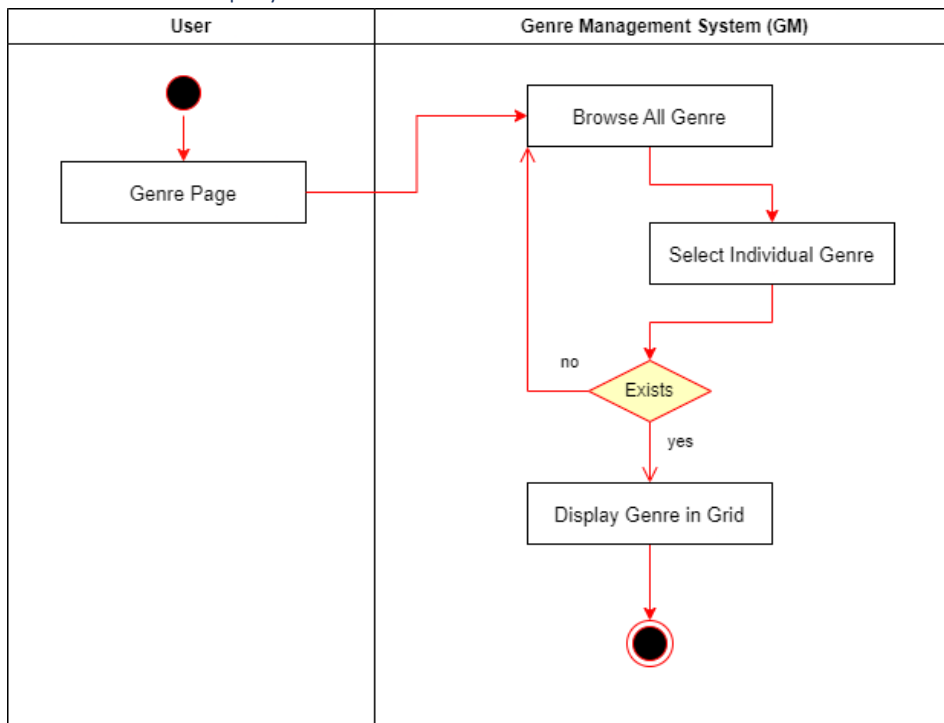


Figure 9: Genre Display (Activity Diagram)

3.3.2. Genre Search

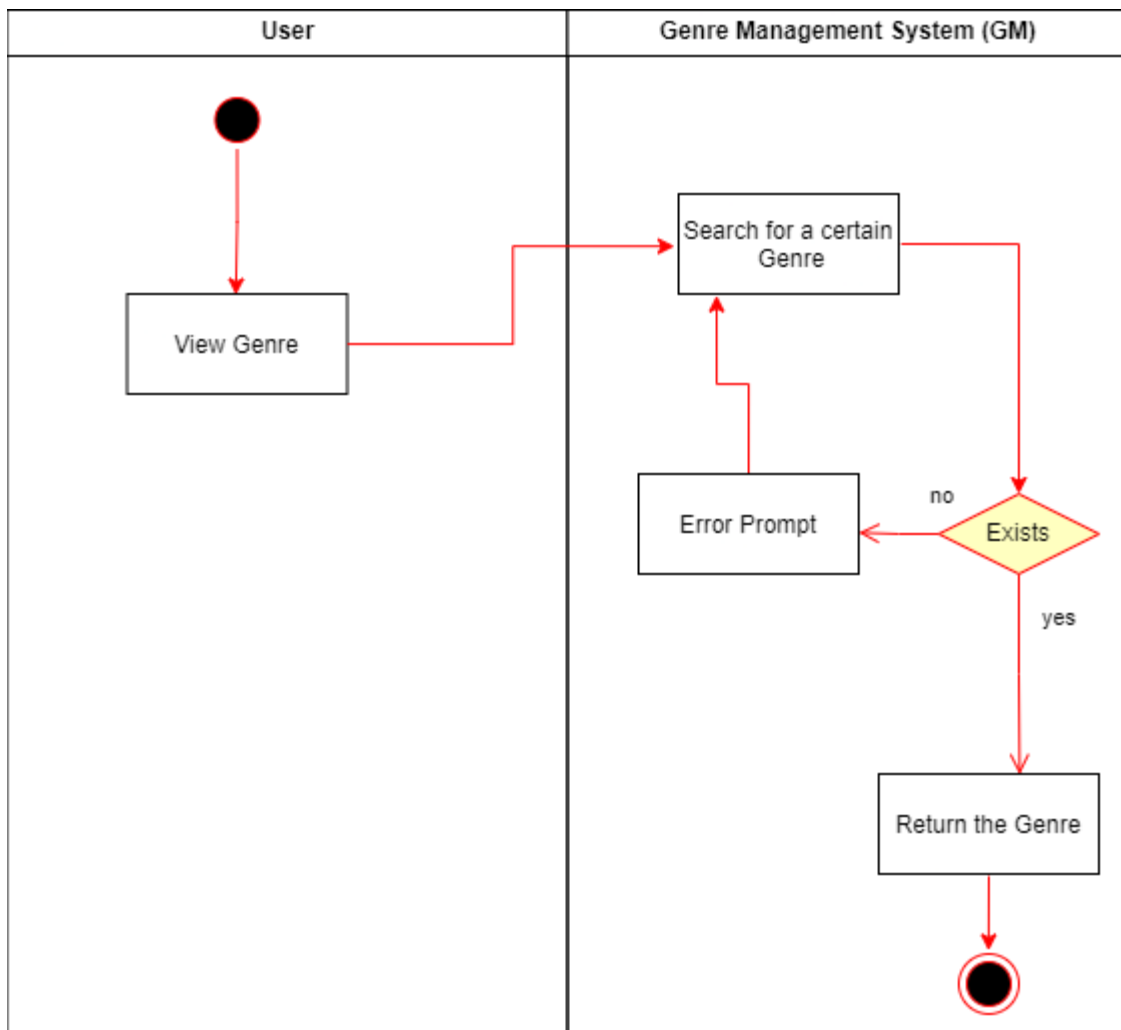


Figure 10: Genre Search (Activity Diagram)

4. Use Case Diagrams

4.1. User Management System

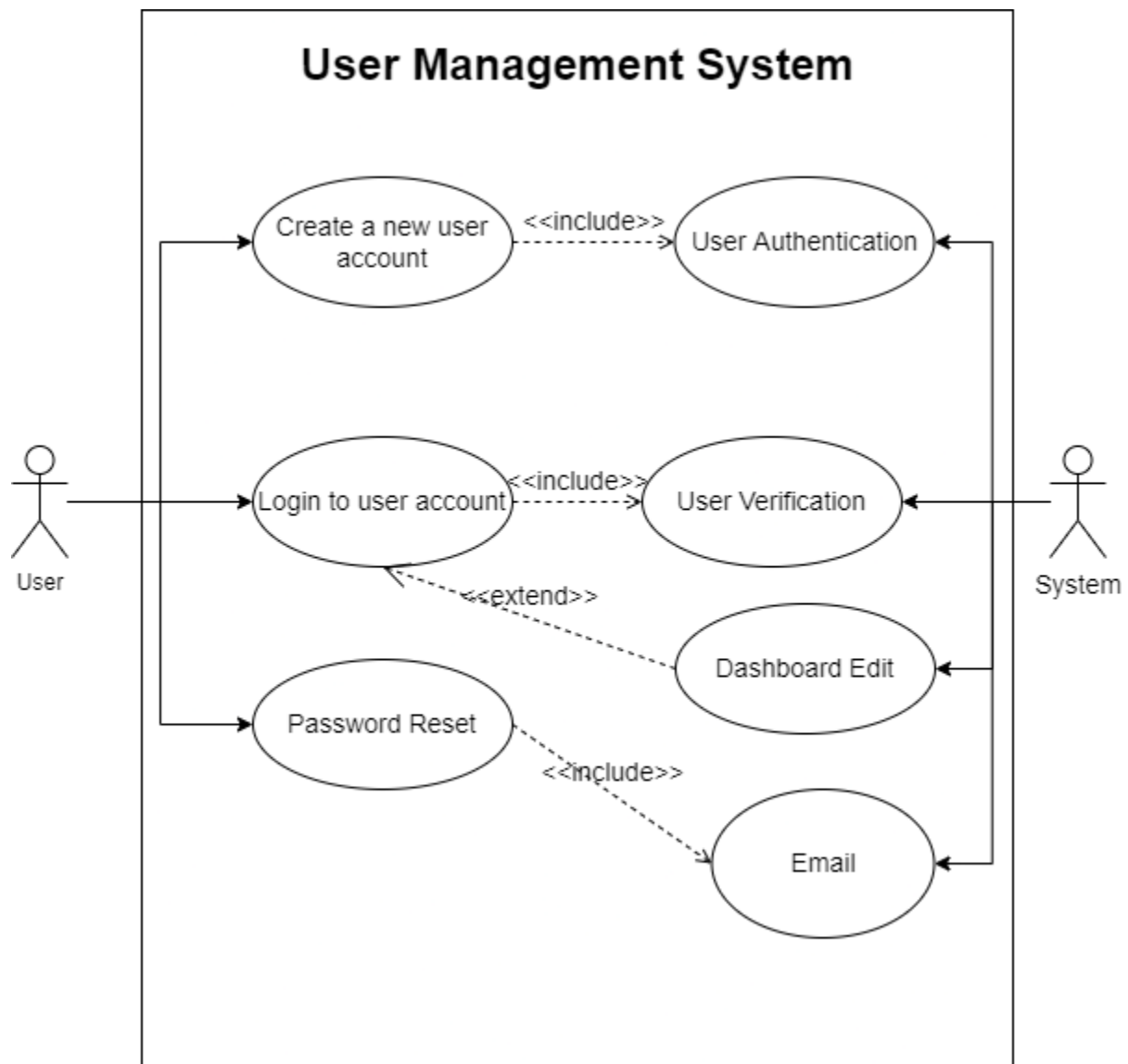


Figure 11: User Management (Use Case Diagram)

4.2. Recommendation Management System

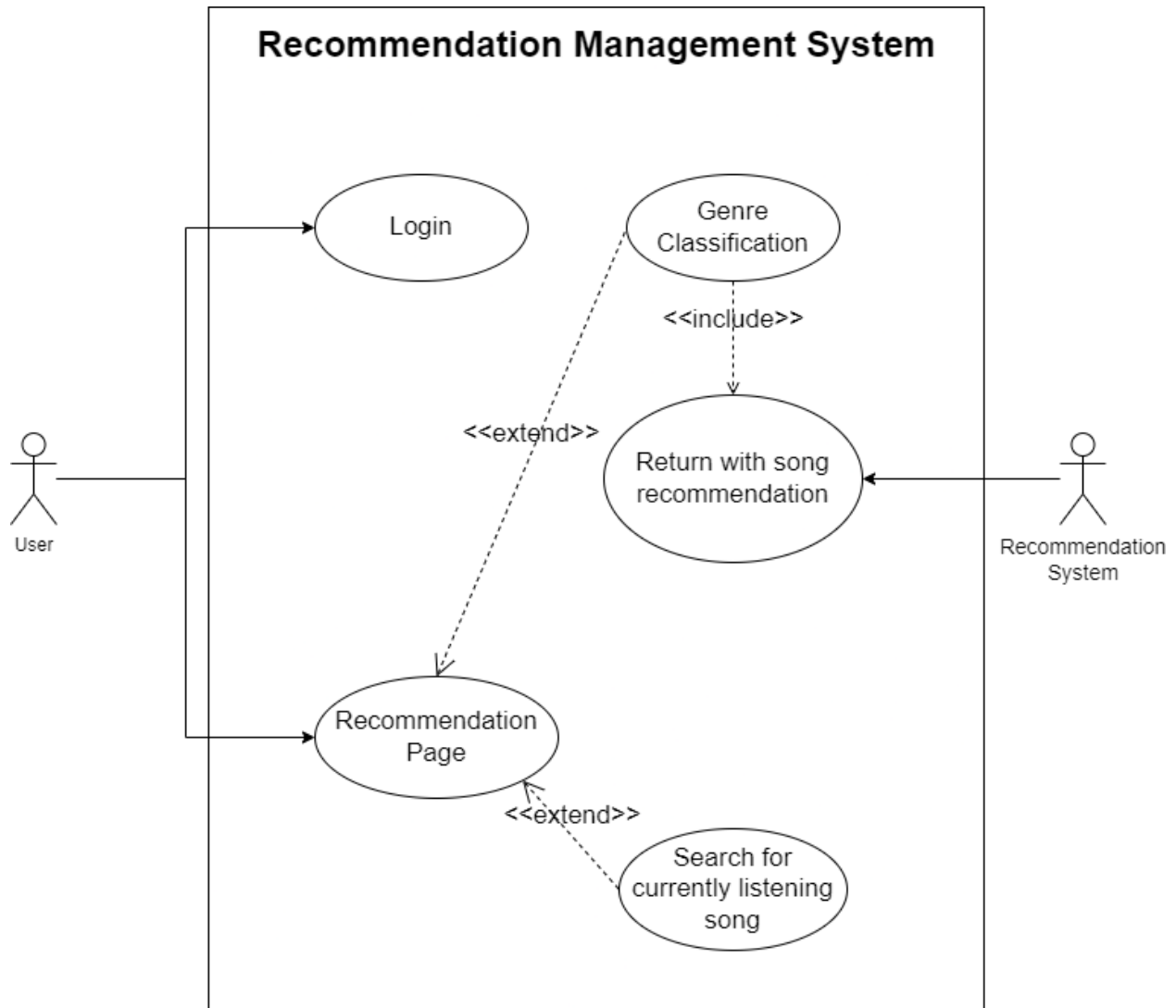


Figure 12: Recommendation Management (Use Case Diagram)

4.3. Genre Management System

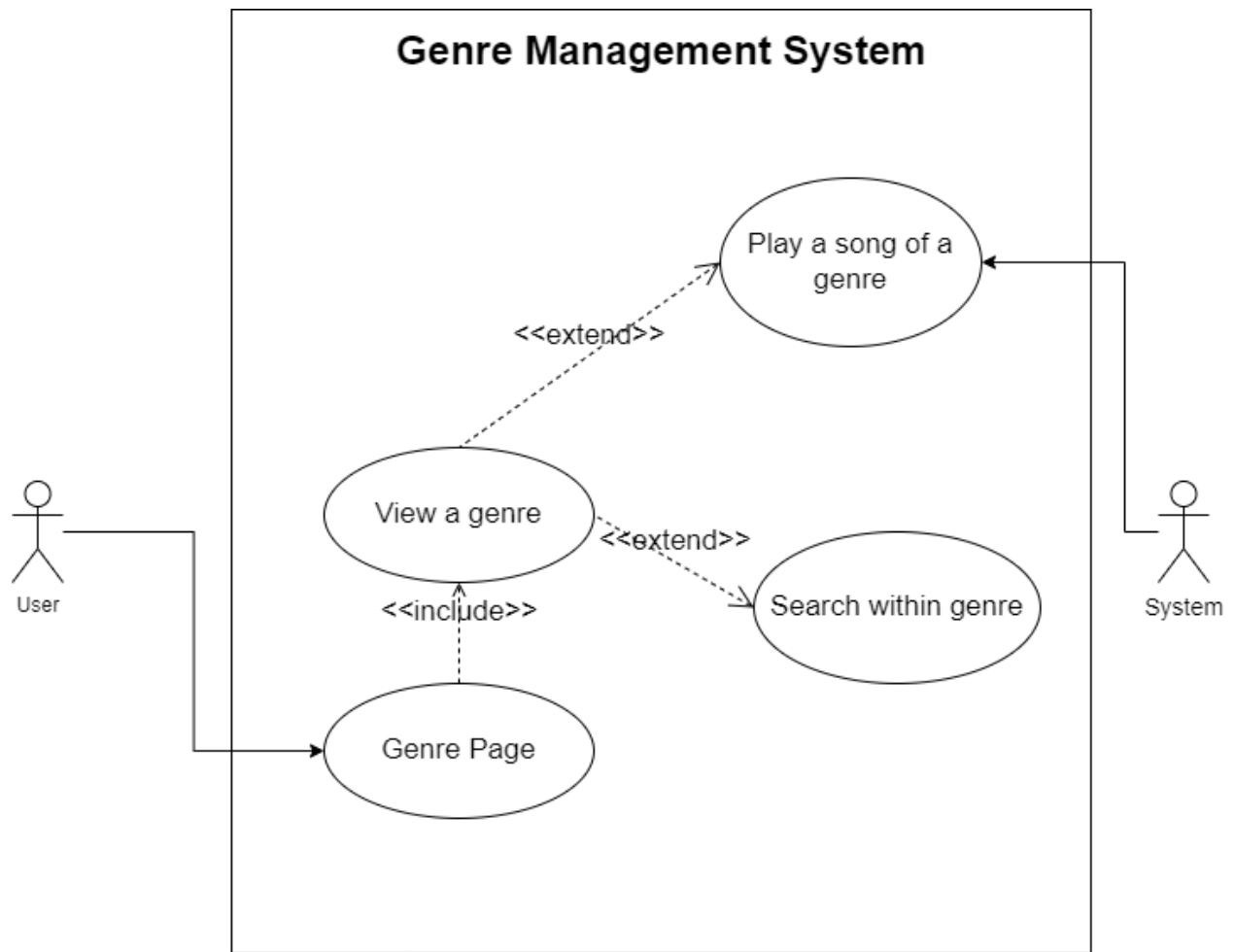


Figure 13: Genre Management (Use Case Diagram)

5. Sequence Diagram

5.1. User Management System

5.1.1. User Registration

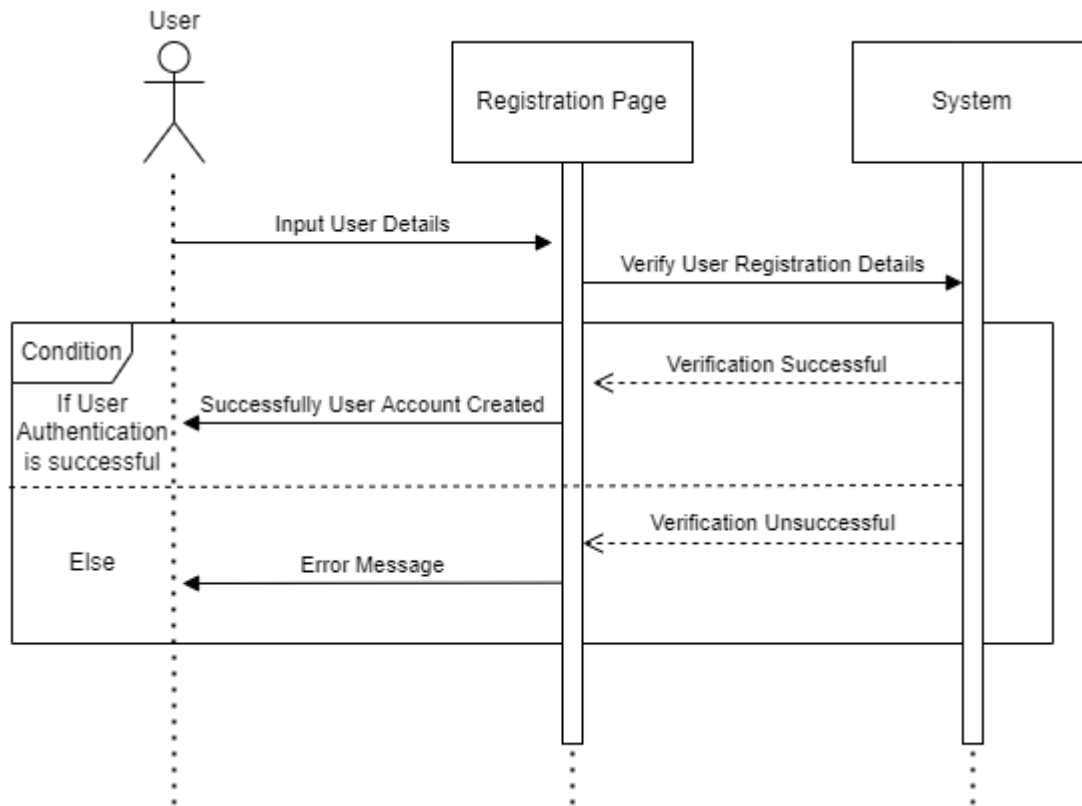


Figure 14: User Registration (Sequence Diagram)

5.1.2. User Login

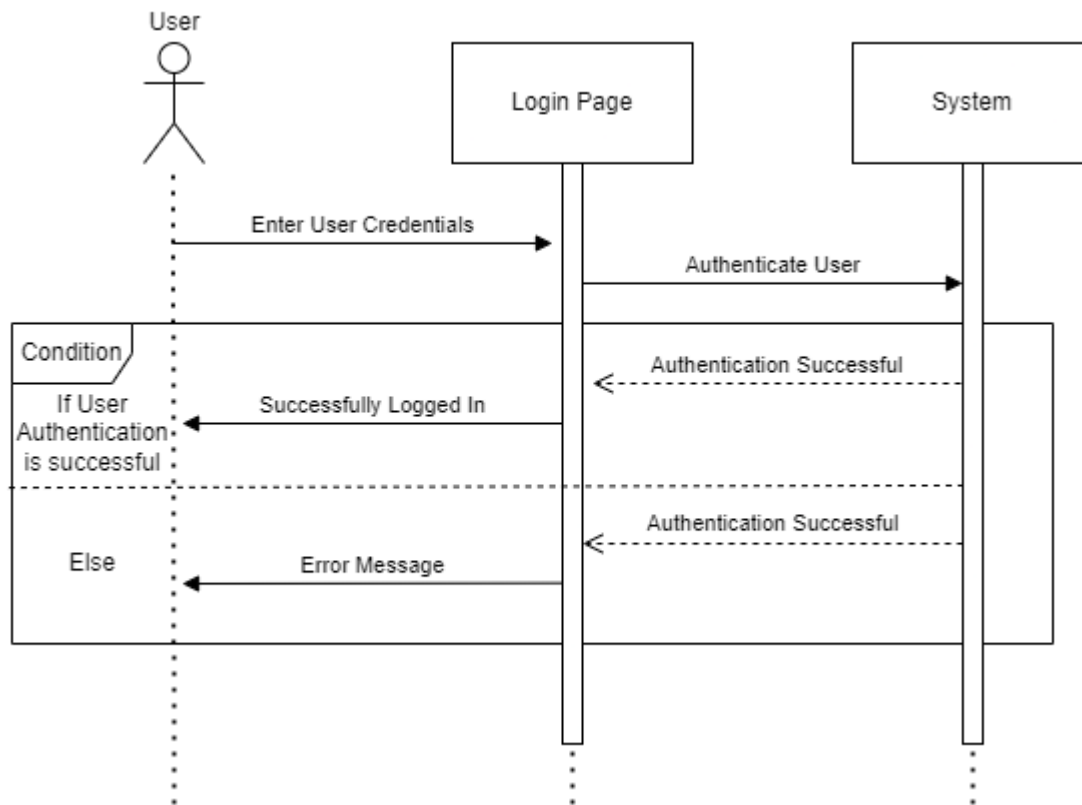


Figure 15: User Login (Sequence Diagram)

5.1.3. User Logout

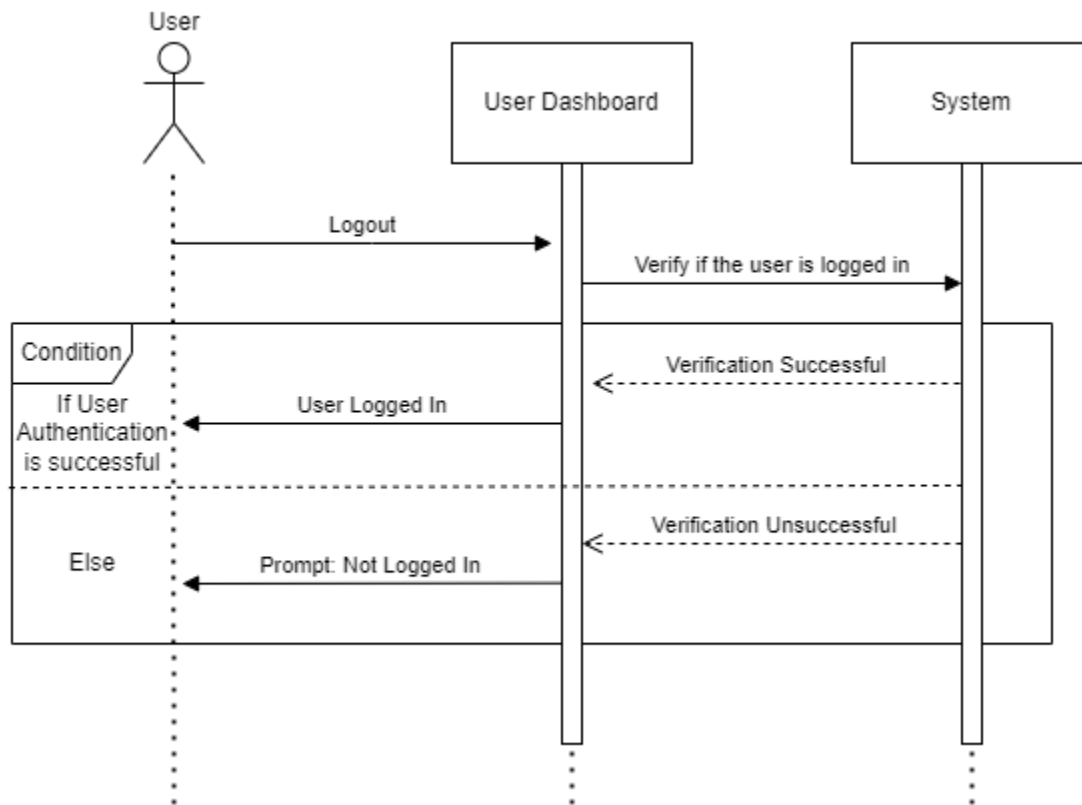


Figure 16: User Logout (Sequence Diagram)

5.1.4. User Password Reset

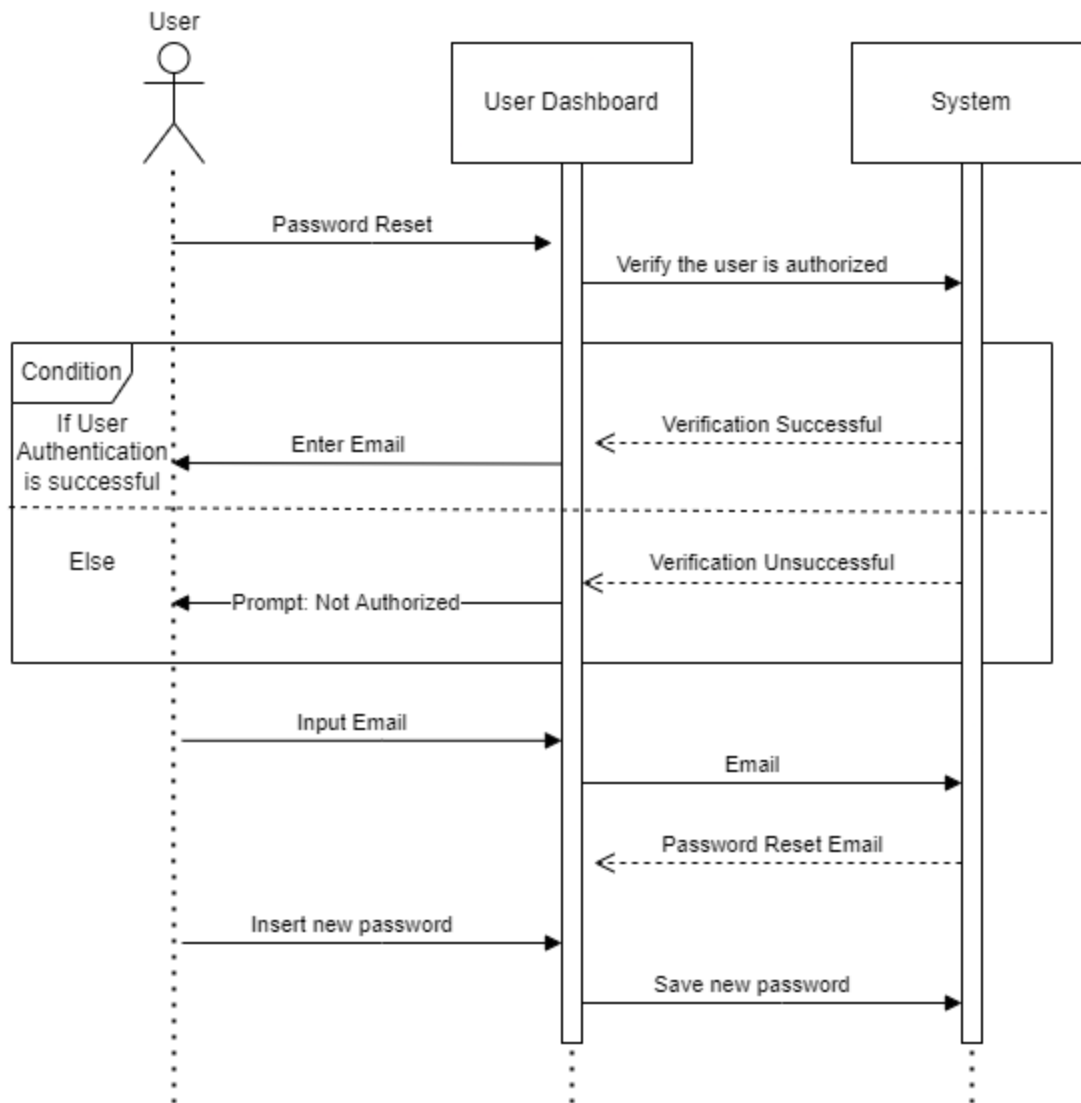


Figure 17: Password Reset (Sequence Diagram)

5.2. Recommendation Management System

5.2.1. Search Query

5.2.2. Song Recommendation

5.3. Genre Management System

5.3.1. Genre Display

5.3.2. Genre Search

6. Wireframes

6.1. Homepage

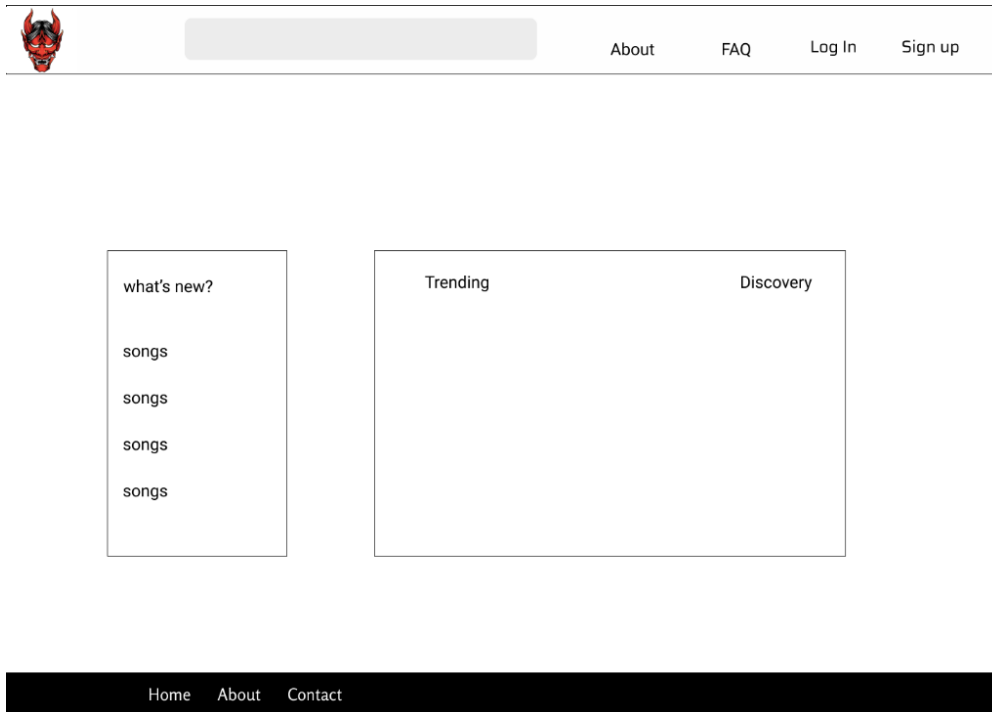


Figure 18: Homepage (Wireframe)

6.2. About Page

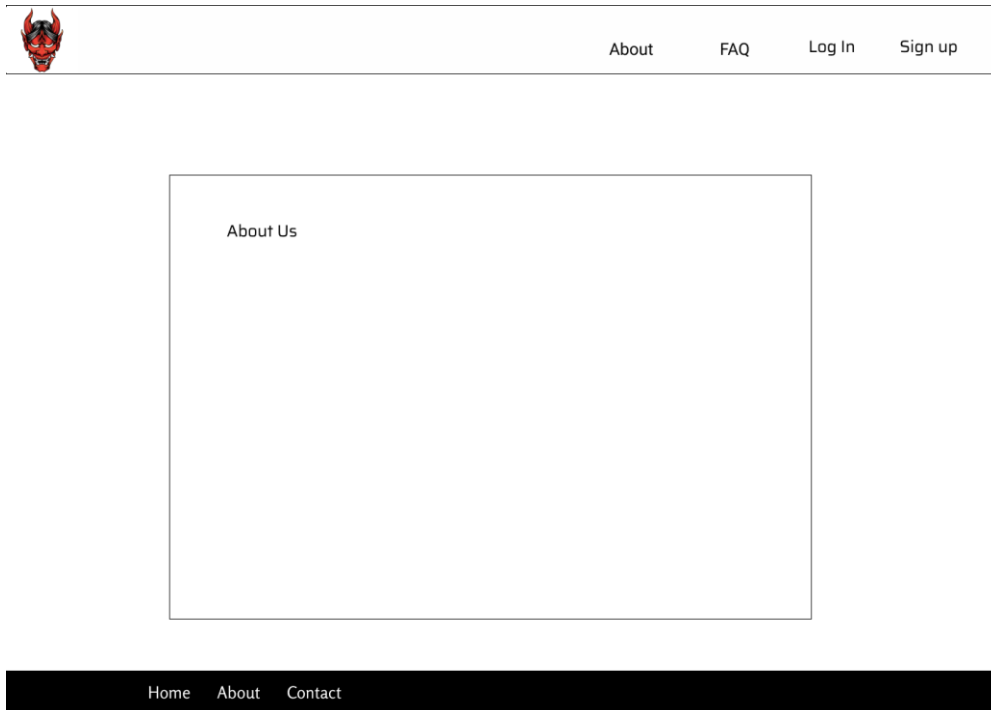


Figure 19: About page (Wireframe)

6.3. Login Page

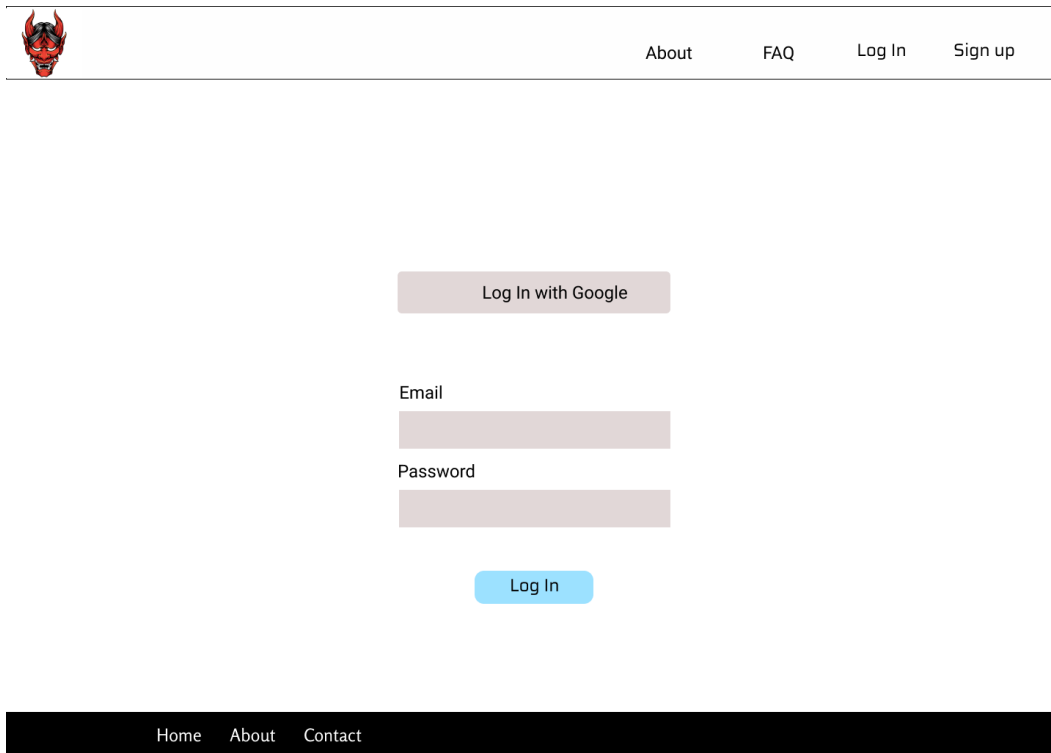
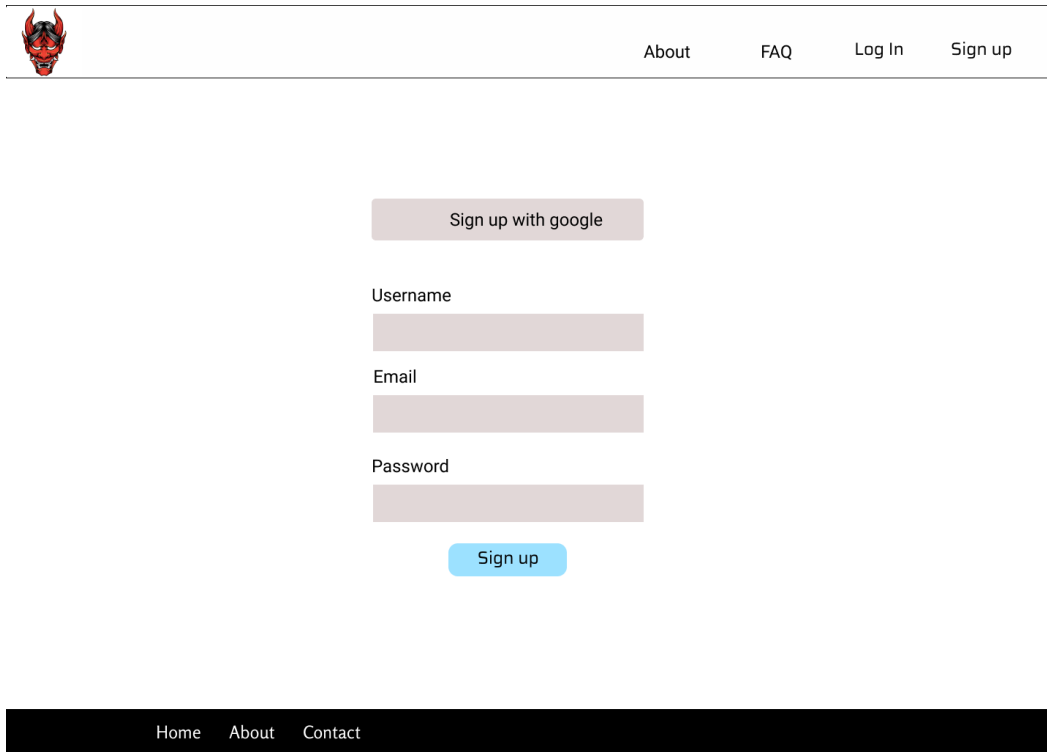


Figure 20: Login page (Wireframe)

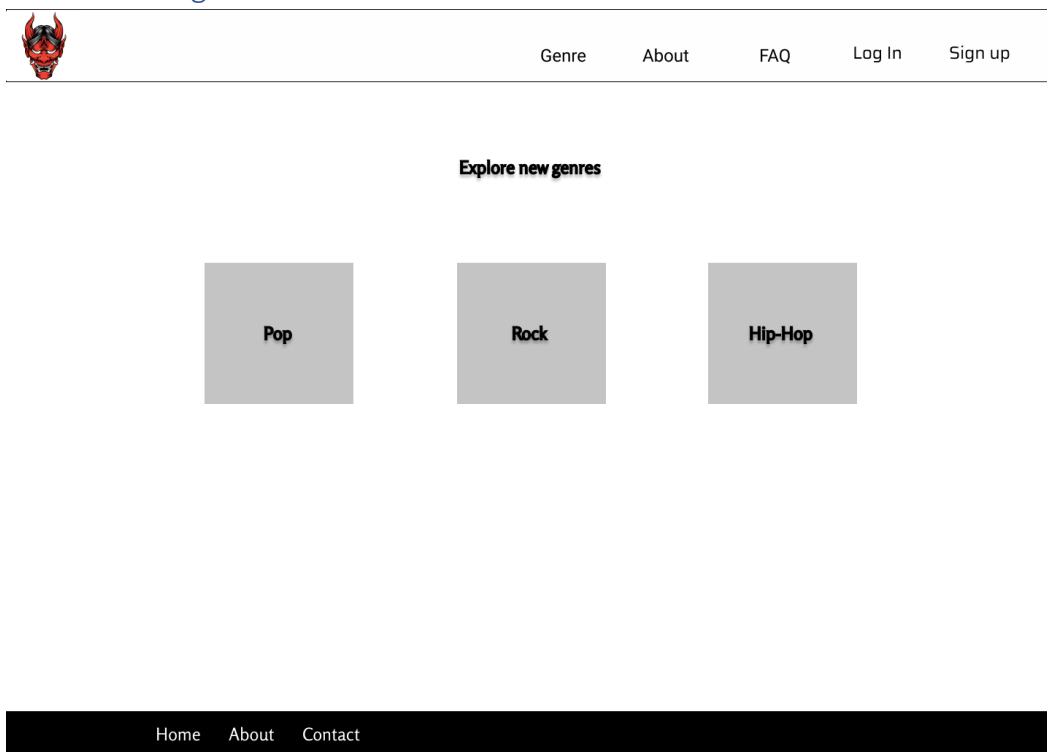
7. Signup Page



The wireframe for the Signup Page features a header with a red devil icon on the left and navigation links 'About', 'FAQ', 'Log In', and 'Sign up' on the right. The main content area contains a 'Sign up with google' button, followed by input fields for 'Username', 'Email', and 'Password'. A blue 'Sign up' button is positioned below the password field. The footer is a black bar with white links 'Home', 'About', and 'Contact'.

Figure 21: Signup page (Wireframe)

7.1. Genre Page



The wireframe for the Genre Page has a header with a red devil icon on the left and navigation links 'Genre', 'About', 'FAQ', 'Log In', and 'Sign up' on the right. The main content area starts with the heading 'Explore new genres' followed by three gray square buttons labeled 'Pop', 'Rock', and 'Hip-Hop'. The footer is a black bar with white links 'Home', 'About', and 'Contact'.

Figure 22: Genre page (Wireframe)

8. Entity Relationship Diagram (ERD)

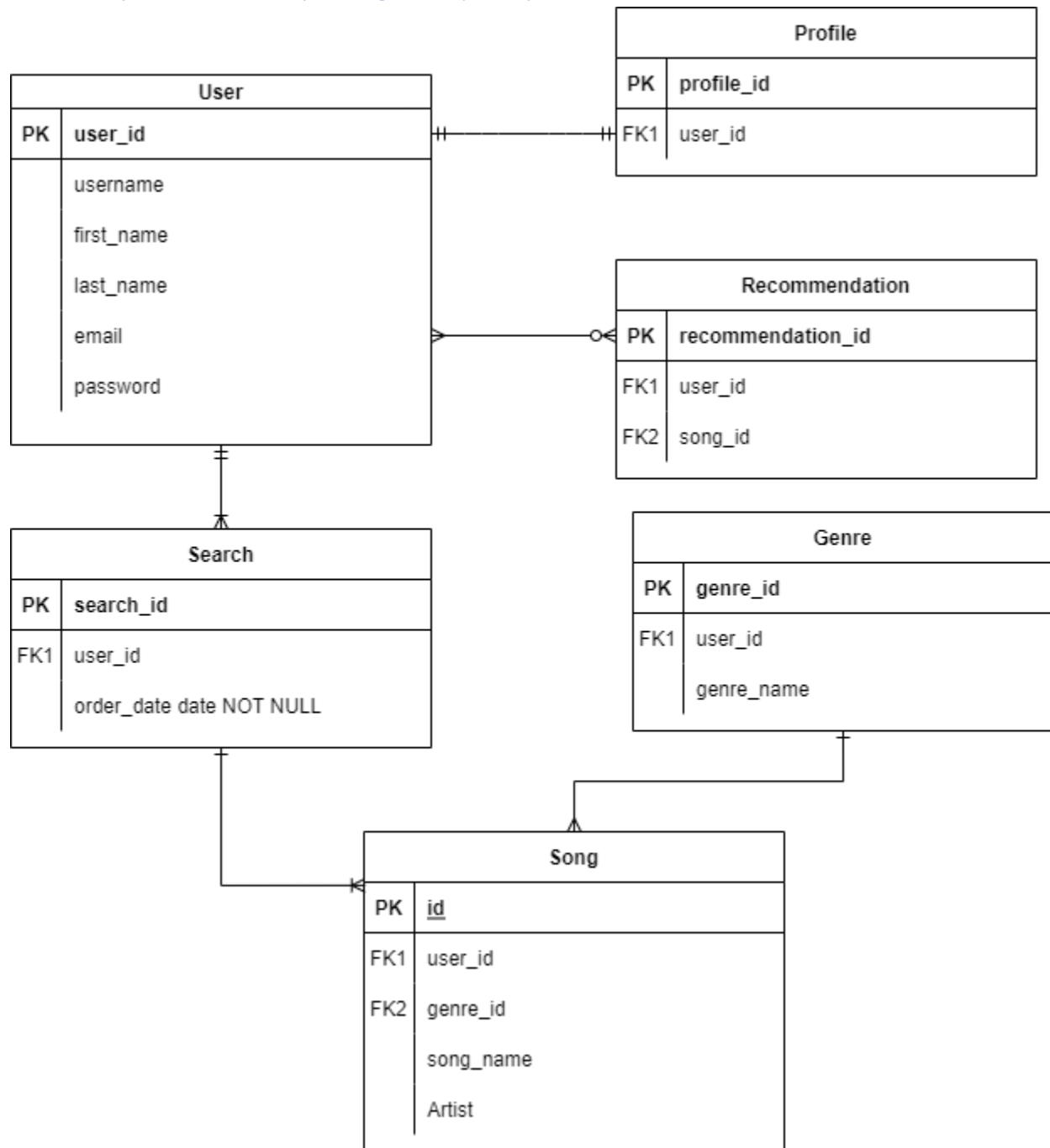


Figure 23: System ERD

9. Data Dictionary

9.1. User

Name	Data Type	Size	Description	Key
user_id	int	8	Unique user id	Primary

firstname	char	20	First name of the user	
lastname	char	20	Last name of the user	
email	char	20	Email of the user	
password	char	20	Password of the user account	

10. Class Diagram (CD)

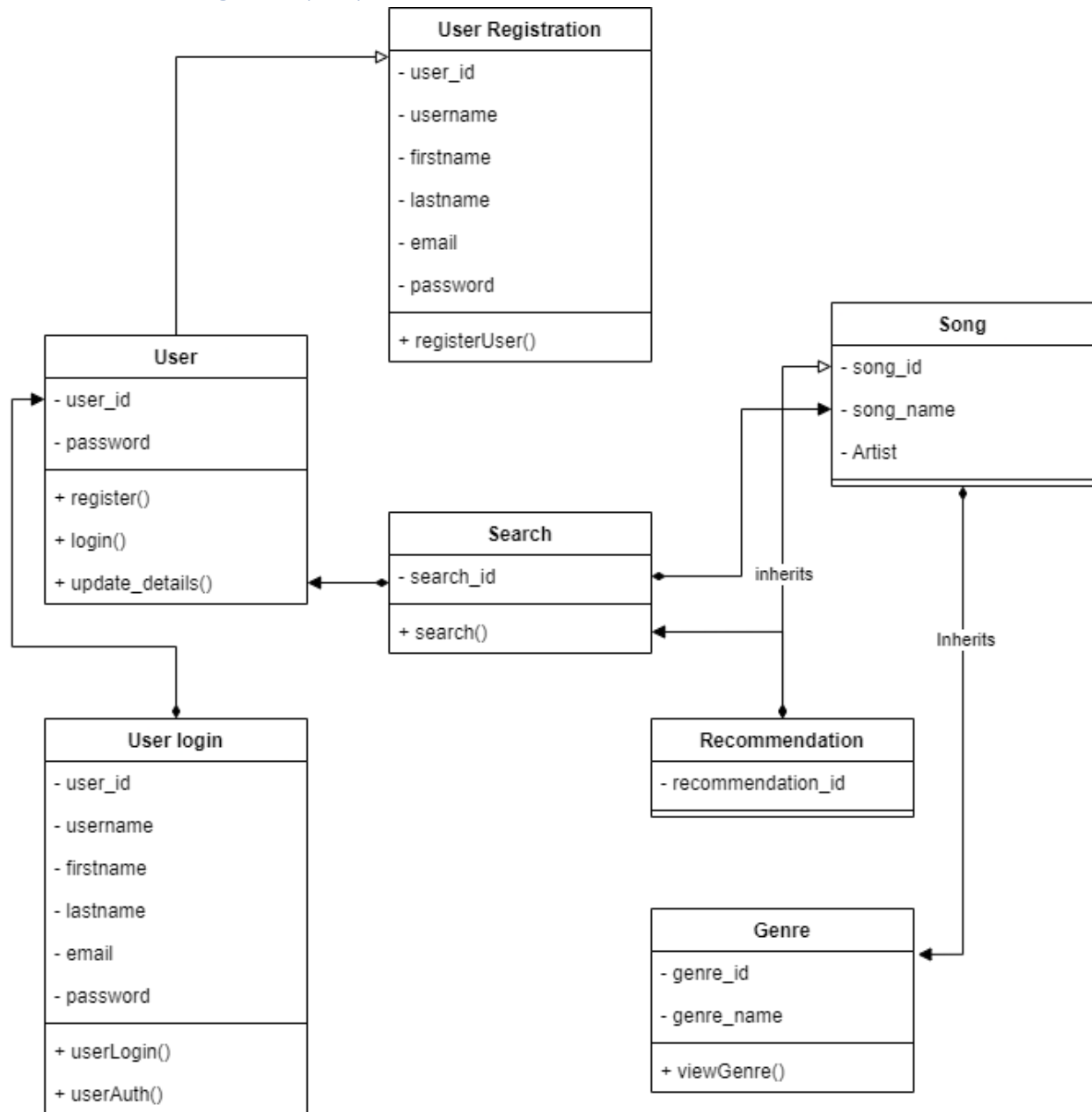


Figure 24: System Class Diagram